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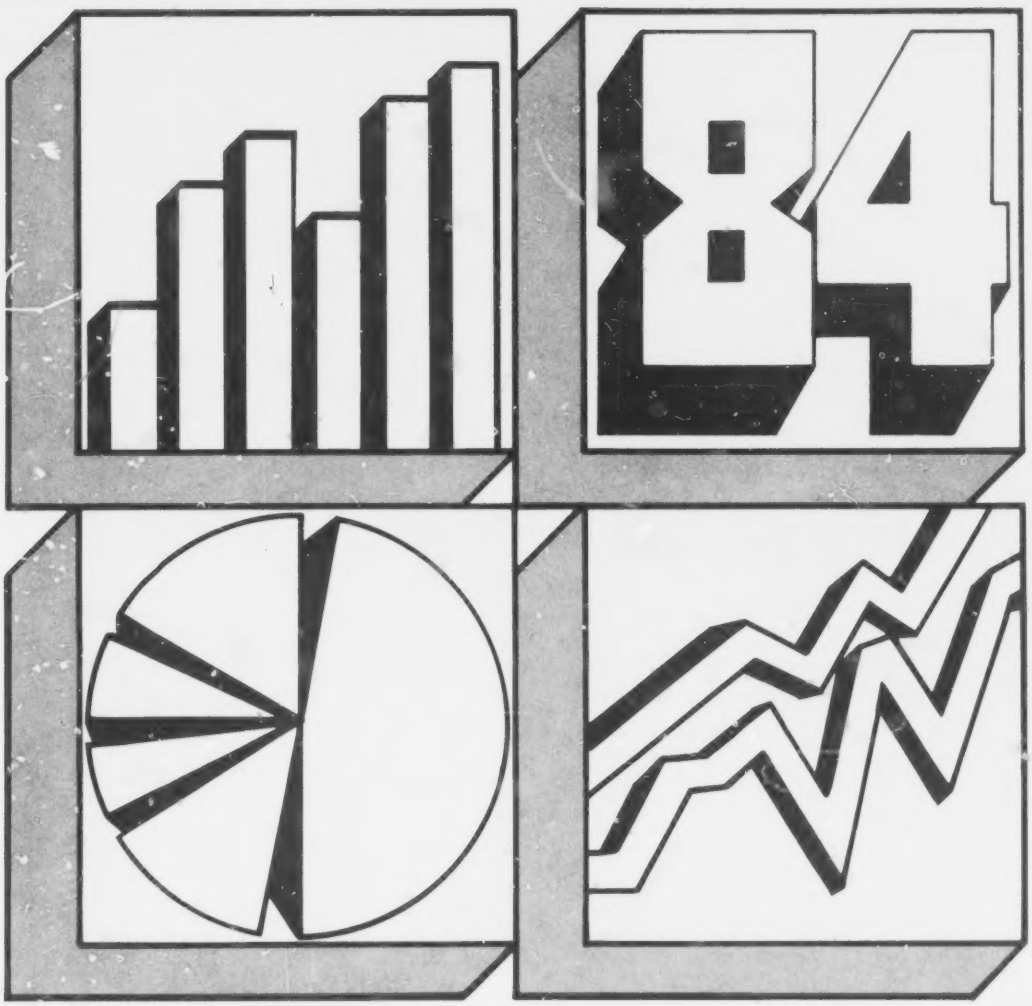
International Business Forms Industries, Inc.

PERSPECTIVE 84



The Present & Future of the Forms Industry

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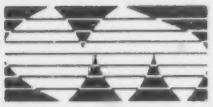

International Business Forms Industries, Inc.

PERSPECTIVE 84

This is the 1984 edition of an annual publication prepared at the direction of the IBFI Economic Research Committee for the benefit of the industry and its customers. Each edition contains a detailed review of the previous year's results and a five-year demand forecast. In addition, the results of any new research undertaken by the staff during the preceding twelve months are presented in these pages.

The author is responsible for all of the estimates and opinions in this volume. All charts and graphs are the work of the author. Every effort has been made to ensure accuracy but it of course cannot be guaranteed.

Norman McLeod

IMPLEMENTATION BY THE IBFI STAFF

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PERSPECTIVE 1984

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Executive Summary

1983 Results: 1983 was not a particularly strong year for business forms sales. The first quarter was especially weak. Forms executives were frustrated to see the economy beginning to take off while their own companies continued to suffer. Unlike 1982, however, the year finished on a strongly upbeat note.

From the middle of the third quarter through to the end of the year, all forms products enjoyed strong unit growth. Only in the case of stock continuous did this unit growth fail to translate itself into more sales dollars and better financial results. Really, the best that can be said of '83 is that it came in almost exactly on the projected real-growth target.

1983 U.S. BUSINESS FORMS SALES BY QUARTER COMPARED WITH 1982 DATA

(Millions of current dollars at shipment values)

Qtr.	1982	1983	Change
I	$1,193.9	$1,153.5	(3.4%)
II	1,153.8	1,160.8	0.6%
III	1,135.2	1,194.2	5.2%
IV	1,206.7	1,326.2	9.9%
TOTAL	4,689.6	4,834.7	3.1%

Pricing Effects: Since the second half of 1981, price competition for most forms products has been severe; for stock continuous forms it has been relentlessly savage. Of the major product categories, only custom continuous and pegboard showed marginal price inflation. Unit sets averaged flat prices over the year as a whole, while prices of stock forms fell by nearly 7%.

Profitability: Price pressures and continuing overcapacity combined with substantial rises in paper prices and moderate rises in labor costs to keep profits down despite a rising market. However, some improvement over 1982 was noted.

1984 and Beyond: 1984 in particular is projected to be a very strong year for forms demand. Furthermore, it is believed that this projection is more likely to be exceeded than to be missed. Looking out to 1988, one sees healthy real growth that will, however, be affected by economic cycles toward the end of the forecast period.

U.S. BUSINESS FORMS SALES
1984 to 1988

(Millions of Jan. 1, 1984 dollars at shipment values)

	Year				
	1984	1985	1986	1987	1988
Product	$	$ %	$ %	$ %	$ %
Custom Continuous	2,136	2,210	2,255	2,280	2,375
Stock Continuous	1,273	1,387	1,494	1,540	1,620
Unit Sets	1,492	1,535	1,547	1,539	1,568
Salesbooks, Pegboard	225	250	275	295	312
TOTAL	5,126	5,382	5,571	5,654	5,875

1983 In Review

1983 was not a particularly strong year in the business forms industry. First-quarter sales in particular were very weak. Measured in current dollars at factory shipment value, sales fell nearly 3.5% below the equivalent quarter of 1982 and nearly 5% below the sales levels achieved in the preceding fourth quarter of 1982. February, 1983, was an especially gloomy time for the industry. Sales in that month were 15% below the year's average (a full 12% off even after seasonal adjustment) and few forms manufacturers were operating profitably during those weeks.

1983 U.S. BUSINESS FORMS SALES BY QUARTER COMPARED WITH 1982 DATA

(Millions of current dollars at shipment values)

Qtr.	1982	1983	Change
I	$1,193.9	$1,153.5	(3.4%)
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TOTAL	4,689.6	4,834.7	3.1%

Thus, had the year not shown any improvement from the dismal first quarter, forms sales after allowance for price changes would hardly have exceeded 1978 levels. Nor did the second quarter of '83 represent any significant improvement. Admittedly, that quarter registered a very slight gain (approximately 0.5%) over the second quarter of the previous year. However, this marginal improvement was more illusory than real, demonstrating the extreme weakness of demand during the same period a year earlier rather than any true strengthening in 1983. Although usually the strongest sales quarter, along with fourth quarter, the second quarter of 1983 saw only $7 million more sales than in the preceding first quarter. Thus the second quarter, too, was a disappointment to many forms manufacturers. Their sense of disappointment was more heightened than alleviated by the realization the economy itself was finally moving strongly upward.

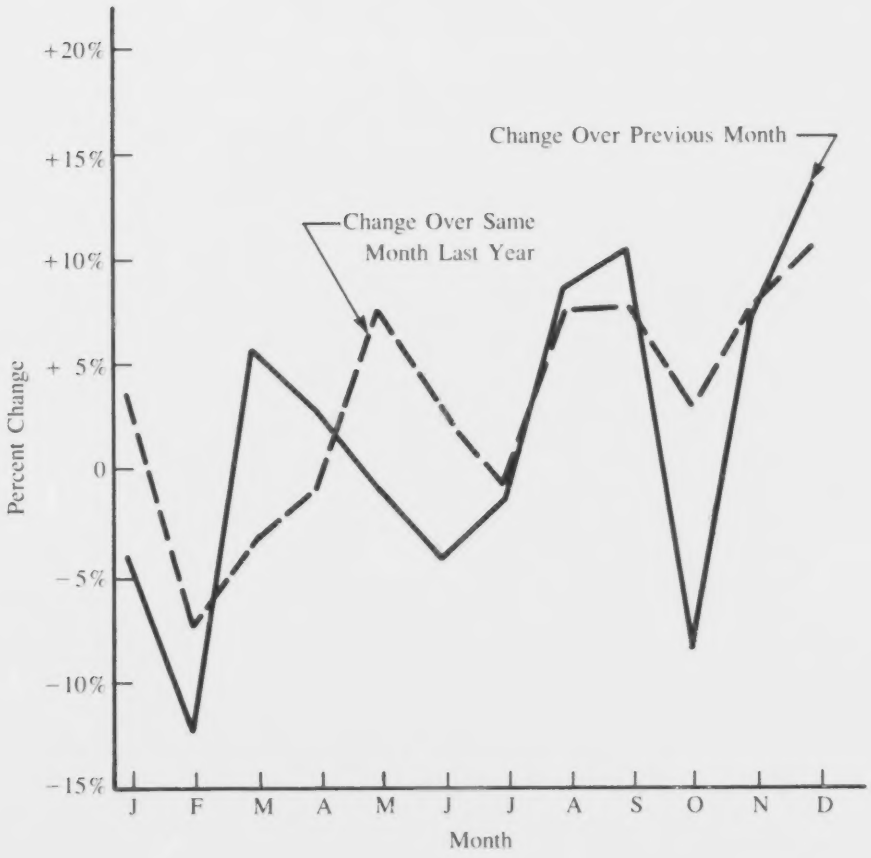
It was not until the third quarter, then, that the improvement in the economy began to have some measurable impact upon our own industry. Even at that, the bulk of the approximate 5.2% year-over-year growth in the third quarter occurred in the second half of that quarter, and more particularly in September itself.

In the fourth quarter, demand for forms finally surged ahead. A worrisome little slowdown in October proved to be temporary, and was more than offset by double-digit growth in December. In fact, December, 1983, proved to be the strongest month for forms shipments in our industry's history - whether measured in current dollars or tonnage.

(See Chart Next Page)

1983 MONTHLY RETAIL FORMS SALES

Change Over Same Month Last Yr. vs. Change Over Previous Month



NOTE: Some values were adjusted for seasonal extremes.

This chart demonstrates graphically the weakness of the first and second quarters as well as the growth surge that began in the third quarter.

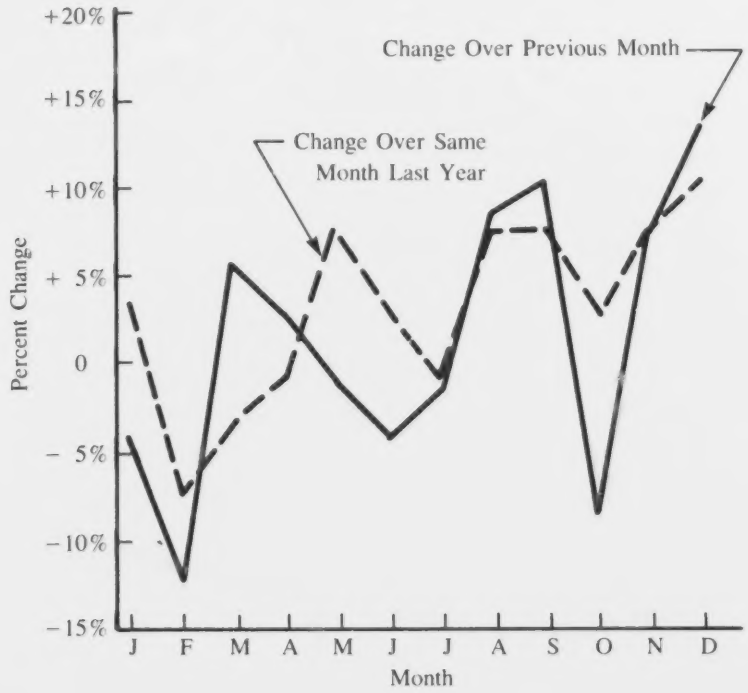
Monthly Swings

In all but the very best years, forms shipments show fairly dramatic swings when examined on a monthly basis. In some years, these swings more or less average themselves out, and a relatively volatile marketplace is visually transformed by presenting quarterly rather than monthly data. In other years, the high and low months tend to group themselves, making the quarterly data appear less consistent than the monthly information. And of course, the value of orders received is far more volatile than is any measure of actual forms shipments.

One cannot responsibly be too precise about these types of year. Nor is there any great utility to be derived from examining month-to-month variations. Nonetheless, these two year types have, I think, definite attributes. Years in which high and low months do not tend to be grouped together are years in which volatility was generated "internally" by the industry, while the other type are years of strong cyclo-economic forces. 1983 was clearly one of the latter. The pattern of monthly shipments was, overall, highly consistent.

1983 MONTHLY RETAIL FORMS SALES

Change Over Same Month Last Yr. vs. Change Over Previous Month



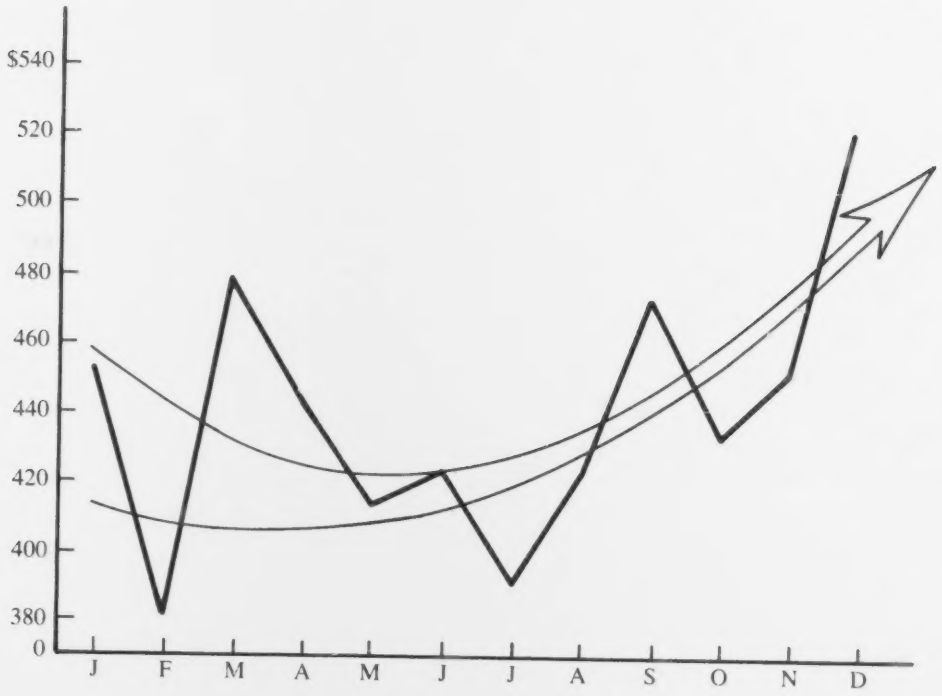
NOTE: Some values were adjusted for seasonal extremes.

Monthly patterns in 1983 were much more consistent than usual. However, actual month-to-month swings were, as usual, more volatile than change over the same month last year.

(See Chart Next Page)

1983 MONTHLY FORMS SALES

Millions of Current Dollars at Retail Value



SOURCE: IBFI Confidential Sales Index

Here we examine sales patterns in dollar terms rather than percent changes. The year's trend patterns are even clearer.

Sales Results By Major Product

Ever since the introduction of the computer, demand for the industry's output has varied - always significantly, often dramatically - from product to product. 1983 was no exception to this general rule. Of the major product lines, custom continuous forms turned in the strongest performance in terms of dollar sales, and stock continuous forms the weakest. Unit sets turned in a middling performance. As befitted that product's role of transaction document, it seems to have been the first to have received solid benefit from the economic turnaround. Even so, its improvement in dollar sales remained slightly below the industry average. Pegboard, or "one-write", systems again drove their product category to an impressive sales gain of more than 10%. Of course, due to their small total market share, the absolute increase in demand for these products was almost negligible to the industry as a whole.

In years to come it will be ever more important to look beyond the traditional major product categories in order to understand industry trends. In 1982 one of the few bright spots in the forms market was the demand for "non-forms" such as response graphics and even some cut-sheet products that could benefit from some of the industry's manufacturing and printing processes. Demand for such products slowed down in 1983. However, one of the more dramatic events in the industry in the last calendar year was the surprisingly rapid substitution of carbonless papers in place of OTC.

1983 U.S. BUSINESS FORMS SALES BY MAJOR PRODUCT COMPARED WITH 1982 DATA

(Millions of current dollars at shipment values)

Product	1982	1983	Change
Custom Continuous	$1,886.0	$2,021.8	7.2%
Stock Continuous	1,229.3	1,183.8	(3.7%)
Unit Sets	1,390.3	1,425.0	2.5%
Salesbooks, Pegboard	184.0	204.1	10.9%
TOTAL	4,689.6	4,834.7	3.1%

1983 U.S. BUSINESS FORMS SALES
By Product and Quarter
Compared with 1982

a. Millions of current dollars at shipment values

	Quarter				
Product	I	II	III	IV	TOTAL
Custom Continuous	494.0	488.3	484.2	555.3	2,021.8
Stock Continuous	284.7	287.2	297.4	314.5	1,183.8
Unit Sets	322.5	336.2	365.3	401.0	1,425.0
Salesbook, Pegboard	52.3	49.1	47.3	55.4	204.1
TOTAL	1,153.5	1,160.8	1,194.2	1,326.2	4,834.7

1983 U.S. BUSINESS FORMS SALES
By Product and Quarter
Compared with 1982

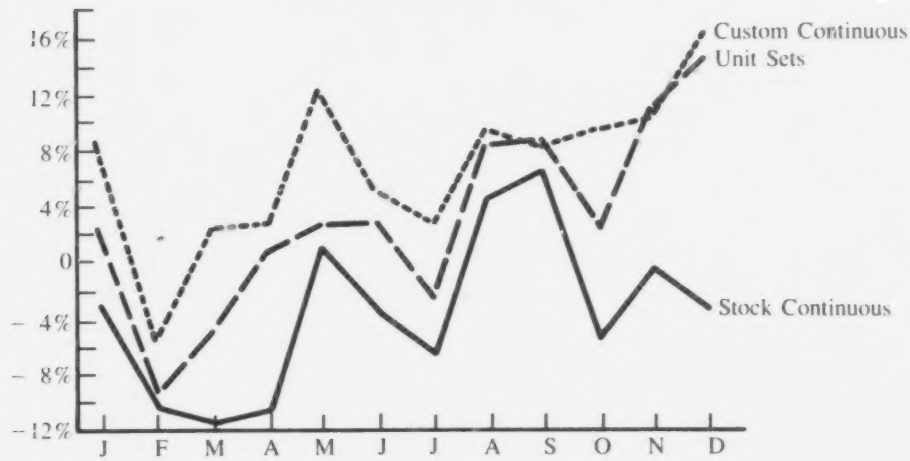
b. % change over 1982

Product	Quarter I	II	III	IV	TOTAL
Custom Continuous	—	6.8%	7.4%	14.8%	7.2%
Stock Continuous	(8.6)%	(7.0)%	5.0%	(3.4)%	(3.7)%
Unit Sets	(4.7)%	(3.6)%	2.9%	10.9%	2.5%
Salesbook, Pegboard	(0.6)%	24.6%	2.8%	20.4%	10.9%
TOTAL	(3.4)%	0.6%	5.2%	9.9%	3.1%

Growth in production of carbonless forms, as measured by shipments of base stock, was well into double digits in percentage terms while shipment of one-time-carbonizing tissues plummeted some 13%. Allegations of "dumping" of OTC tissues by Scandinavian and other foreign mill(s) could not be substantiated, and much of the movement was certainly due to a product introduction from Moore Business Forms. Moore pushed on a nationwide scale the sale of its new groundwood-based black-print carbonless. Utilizing proprietary technology said to offer cost advantages over many competing carbonless processes, and emphasizing the desirable characteristics of the black-print, Moore succeeded in switching many customers from OTC to carbonless in all or part of their multi-part forms. Looking ahead, it is not likely that OTC use will continue to decline at such a rapid rate in single years in the future. Nonetheless, Moore's impetus here can only hasten the continuing substitution of carbonless for carbon-interleaved multi-part forms that has, after all, been going on for over twenty years.

1983 U.S. BUSINESS FORMS SALES
3 MAJOR PRODUCTS

% change over same month last year

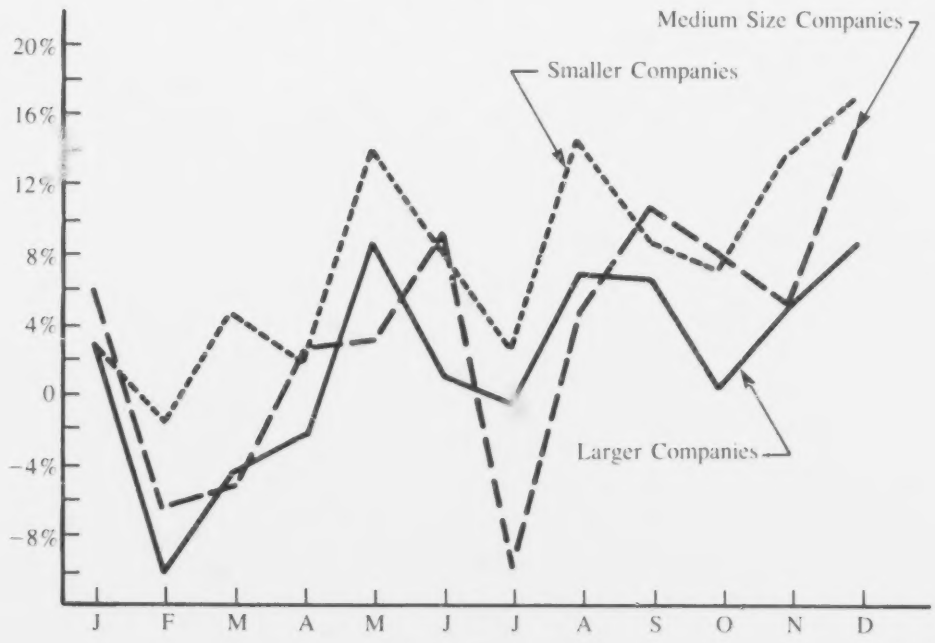


This chart demonstrates that custom continuous was the only major product to register consistent (though hardly spectacular) gains over 1982. All three major product lines moved in an unusually consistent pattern until the fourth quarter, when stock continuous forms failed to enjoy the sales dollar growth experienced by the other products. When turned from percent change into dollar aggregates, however, the differences from product to product loom much larger.

1983 Sales by Company Size

In terms of dollar sales, companies of all sizes enjoyed a similar improvement. In virtually all cases, the period February - April of 1983 saw the bottoming out of a slide that had begun in 1981. The smallest companies came back a bit faster than their larger brothers, but then many of them had gone deeper into the hole as well. Small or large, the period May - August was characterized by mixed results. Most (though not all) companies experienced substantial improvements from September through the end of the year.

1983 U.S. BUSINESS FORMS SALES
Percent Change Over Same Month in 1982
By Size of Company



Nor, with only a few exceptions, did company size have much effect on pricing trends from company to company. Larger companies, with their greater reliance on large orders, experienced even greater-than-usual price competition for these large orders, especially in stock and semi-stock items. At the same time, large companies that were using their resources to start selling smaller - often very small - orders to the new generation of forms users found satisfactory volume at that end of the market but were typically not yet recovering their start-up costs. The smaller companies, meanwhile, were also running into a lot of price competition for the typically cyclical unit set orders on which much of their sales volume is built. While price competition was somewhat less severe for "traditional" short and medium run custom continuous forms, even in this part of the market most forms manufacturers found themselves unable to pass on all their own cost increases to the customer.

If one could single out any aberration in performance by company size, the medium-sized companies were in 1983 the most volatile group, a distinction usually held by the industry's smaller companies.

1983 U.S. FORMS SALES BY COMPANY SIZE COMPARED WITH 1982

(in millions of current dollars at shipment values)

Company Size*	1982	1983	% Change
$50+	$3,132.4	$3,241.2	3.5%
20-50	500.5	510.5	2.0%
10-20	247.1	253.2	2.5%
3-10	475.0	490.5	3.3%
0-3	334.6	339.3	1.4%
TOTAL	4,689.6	4,834.7	3.1%

Distribution Channels

In 1982 one of the key determinants of results in particular companies or industry segments seemed to be distribution channel. During that year, most forms manufacturers selling through indirect channels suffered less slippage in sales than did direct-selling companies. The figures on the bottom line tilted even more strongly toward the indirect-selling companies.

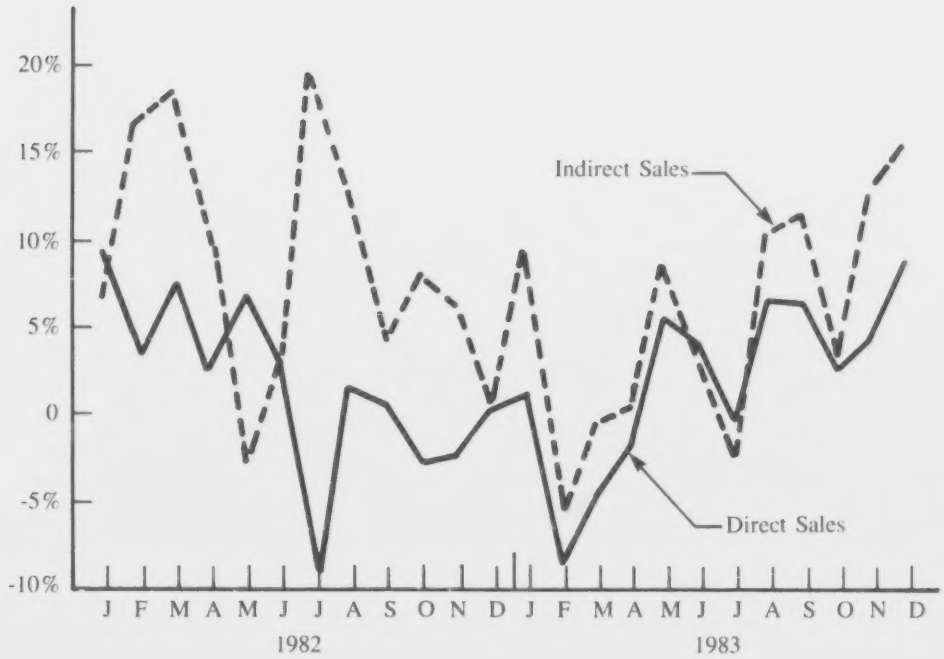
Certainly one reason was the lower overheads that such companies can often achieve. This was examined in some detail in last year's Perspective. Another, more positive reason was that some of the indirect-selling companies were well positioned, whether through chance or foresight, to take advantage of the growing market for very small orders.

The evidence from 1983 suggests that in many cases, the indirect-selling companies are less well positioned in a rising market. Throughout the year, improvement of sales for direct and indirect-selling companies moved in remarkable synchronization. It is likely that the slightly better improvement achieved by the indirects as a group was due to a few individual companies from within their ranks, such as NEBS, using unconventional sales techniques to tap the small-user market.

SALES RESULTS BY DISTRIBUTION CHANNEL 1982-83

Retail Sales At Current Dollar Value

Percent Change Over Same Month in Previous Year



(See Tables Next Page)

1983 SALES RESULTS
Direct versus Indirect Sales by Major Product
Retail versus Shipment Values
(all dollar amounts in millions of current dollars)

Product	Total Sales, Retail Value	Direct Sales[1]	Retail Indirect Sales Incl. Mark-up	Indirect Sales at Shipment Value	Retail Mark-up
Custom Continuous	2,189.3	1,463.4	725.9	558.4	167.5
Stock Continuous	1,218.9	949.9	269.0	233.9	35.1
Unit Sets	1,578.6	986.2	592.4	438.8	153.6
Salesbooks, Pegboard	254.4	78.4	176.0	125.7	50.3
TOTAL	5,241.2	3,477.9	1,763.3	1,356.8	406.5

[1]For direct sales, retail and shipment value are the same

	Retail Value		Shipment Value	
Product	% Direct	% Indirect	% Direct	% Indirect
Custom Continuous	66.8%	33.2%	72.4%	27.6%
Stock Continuous	77.9%	22.1%	80.2%	19.8%
Unit Sets	62.5%	37.5%	69.2%	30.8%
Salesbooks, Pegboard	30.8%	69.2%	38.4%	61.6%
TOTAL	66.4%	33.6%	71.9%	28.1%

Real Growth

In recent years differentiating between "real" and "apparent" growth has become more and more important. Both long-term inflation and long-term declines in the value-added content of the typical forms order have made total current-dollar sales a less and less reliable figure. The decine in value-added is more likely to accelerate during the remainder of the decade than it is to decline. As for inflation, it really is quite unlikely that the experience of the last couple of years will prove to be more than a respite.

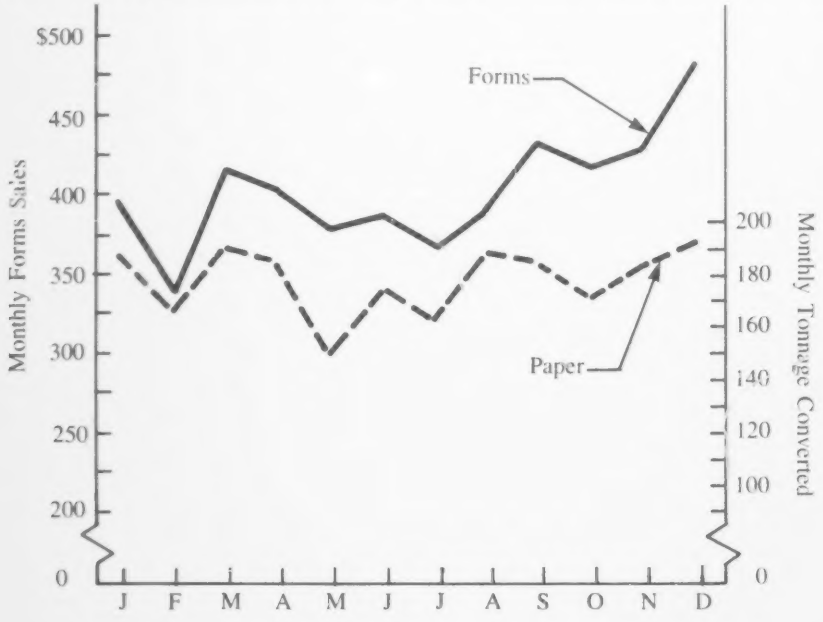
The Bureau of Labor Statistics has finally started to collect data on price movements in the forms industry. Though early reports covering the first months of 1984 had some disappointing anomalies, once this data series has gone through a little "shakedown cruise" it will be of incalculable assistance to the industry's analysts. For 1983, however, we must continue to rely upon estimates.

It is apparent that price movements are the key to differentiating real from apparent growth in 1983. As in the prior year, price list changes were of little or no significance. As in the prior year, mill shipments of forms bond gave substantially different signals compared with the forms industry itself. As in the prior year, price competition was tough and pervasive - a situation that was correctly forecast in last year's Perspective.

1983 FORMS SALES AND TONNAGE CONVERTED

Forms Sales in Millions of Current Dollars at Shipment Value

Tonnage in Thousands of Tons of Form Bond, Groundwood, and Carbonless Papers (excludes OTC, ledger and other heavy papers, and rag papers)



By year-end forms manufacturers reported a 4.1% gain in tonnage converted as opposed to a 3.1% increase in dollar sales. We see here that price pressures were severe up to and beyond mid-year, but that some improvement occurred in the fourth quarter.

Again, IBFI's tonnage index provides one with a reliable guide to "real" trends in demand. This series shows that early in the year, forms prices were dropping and tonnage movements were doing a better job of keeping up. In the second half of the year, prices began to improve.

Of course, these crude overall results differed rather dramatically from product to product. The price competition in stock forms sales was so heavy that price levels for that product dropped by close to 7% during the year. Prices for unit set forms averaged out to being approximately flat for the year as a whole, with the product winning back some ground in the second half of the year that it had been forced to give up during the first half. Prices for pegboard systems were much less sensitive to price competition. Custom continuous forms enjoyed a rise in average price levels which, though modest, was somewhat surprising in light of the greater popularity of stock continuous forms in recent years.

1983 U.S. BUSINESS FORMS SALES
Real vs. Dollar Growth

	Change Over 1982	
Product	**Current $**	**Real**
Custom Continuous	7.2%	5.8%
Stock Continuous	(3.7)%	3.2%
Unit Sets	2.5%	2.5%
Salesbooks, Pegboard	10.9%	6.0%
TOTAL	3.1%	4.1%

1983 Mill Shipments

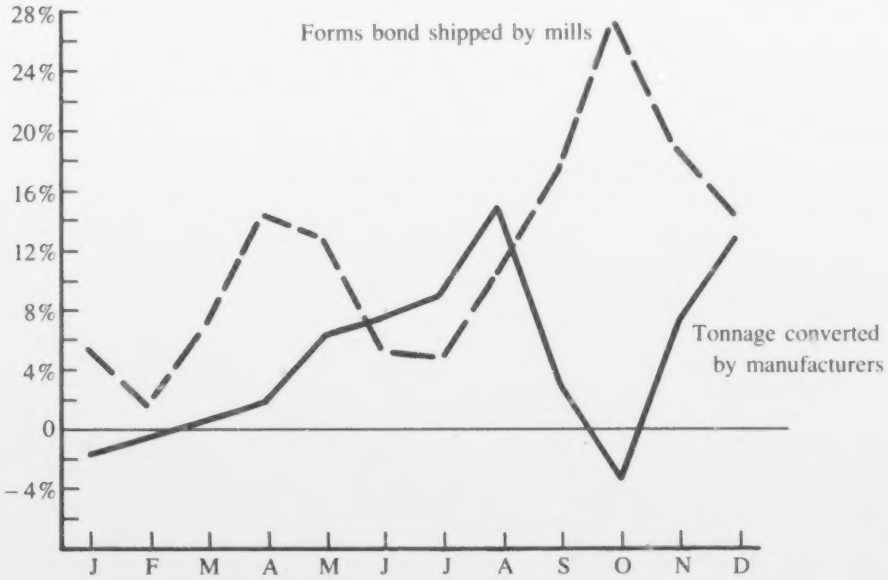
During 1982 mill shipments suffered extremely sharp drops in demand from forms converters. The available evidence demonstrated clearly that many converters were reducing their stock of raw materials relative to their then-current levels of business. Added to a slide in demand for forms as well as many other end-uses of printing and writing papers, this reduction of stock helped create an extremely competitive paper market.

In 1983, shipments of forms bond to forms manufacturers surged ahead. Throughout the year, mill shipments significantly exceeded improvements in demand for finished forms. Obviously, some restocking was going on. Fortunately for the paper mills, genuine increases in final demand for their finished products were being felt by the time the restocking cycle began to wind down.

This discrepancy was especially noticeable from September through to the end of the year. During this period, the evidence suggests that the forms industry ordered and received substantial amounts of "speculative" tonnage - speculative in the sense that forms manufacturers were (a) fearful of shortages, and (b) "stocking up" in anticipation of widely rumored price increases.

1983 PAPER TONNAGE MOVEMENTS

percent change over same month last year



Note the large discrepancy in these two series from September to December inclusive. This represents purchases in anticipation of paper price boosts and/or fear of allocations. Excess inventory must have reached such proportions by November that forms manufacturers began working it off. Thus mill shipments were declining during two months in which forms shipments were skyrocketing. Even so, forms bond inventories were probably 150,000 tons above normal at year-end.

(See Tables Next Page)

1983 PAPER INVENTORIES

Forms Bond Held By U.S. Business Forms Manufacturers

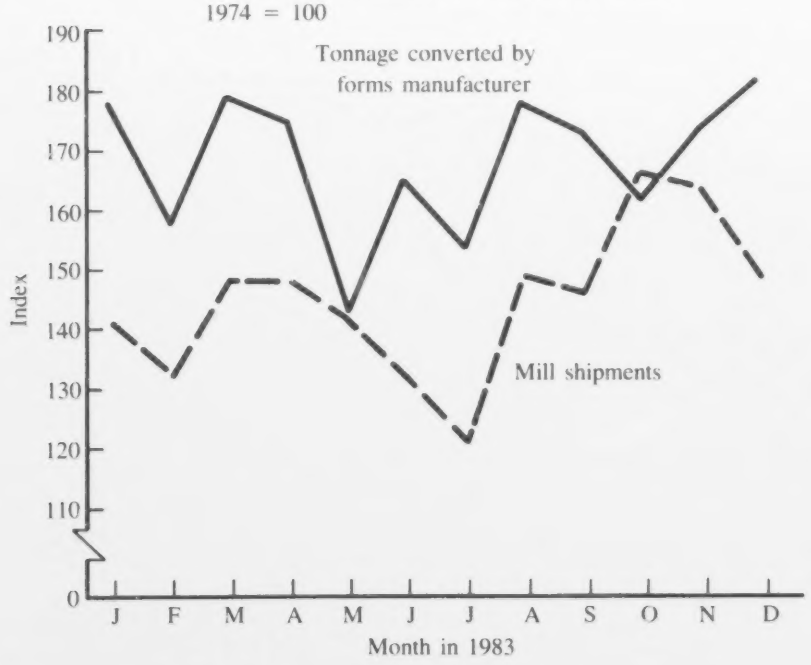
expressed as percentage of normal stock

	Quarter			
	I	II	III	IV
All Companies	101%	102%	102%	114%
Small Companies	94%	87%	86%	98%
Medium-sized Companies	86%	92%	96%	109%
Large Companies	108%	99%	94%	121%

Here we see further evidence of a build-up of paper inventory by year-end. It is not expected to present a problem to paper mills in a rising forms market. It is doubtful, however, that the same double-digit growth rates in forms bond sales can be maintained through 1984.

PAPER TONNAGE INDEX

Sources: IBFI (tonnage converted by forms mfrs.)
API (tonnage of forms bond shipped by mills)
1974 = 100



Here we look at absolute tonnage movements instead of percent changes. (The difference in relative levels is because the mill index number is strictly forms bond while the IBFI index is broader in coverage).

Capacity Utilization and Profitability

The preceding pages have described an industry that is coming out of a long stagnation, even slump, in demand for its product - and coming out of it with considerable buoyance as well. That description bodes well for the immediate future; it is not, however, consistent with adequate profitability. And profitability in the forms industry in 1983 was marginal at best.

Of course, in no other area do annual results differ as dramatically from company to company. Furthermore, it is much more difficult to compare bottom lines than it is to compare sales trends. Many smaller companies could be said to have "lived on their equipment" in the sense that while their nominal return on sales was marginal or even negative, they made an adequate short-term profit in terms of cash flow.

KEY 1983 OPERATING RATIOS AND BALANCE SHEET ITEMS FOR U.S. BUSINESS FORMS MANUFACTURERS

by quarter

Net Income (pre-tax)

	I	II	III	IV
All Reporting Companies	5.62%	4.87%	4.87%	5.34%
Small Companies	6.77%	4.48%	5.75%	6.29%
Medium-sized Companies	4.41%	6.07%	4.37%	6.12%
Large Companies	6.85%	6.51%	6.08%	3.93%
Direct-Selling Companies	4.85%	4.25%	4.95%	5.23%
Indirect-Selling Companies	6.12%	5.13%	4.99%	5.63%

Return on Investment

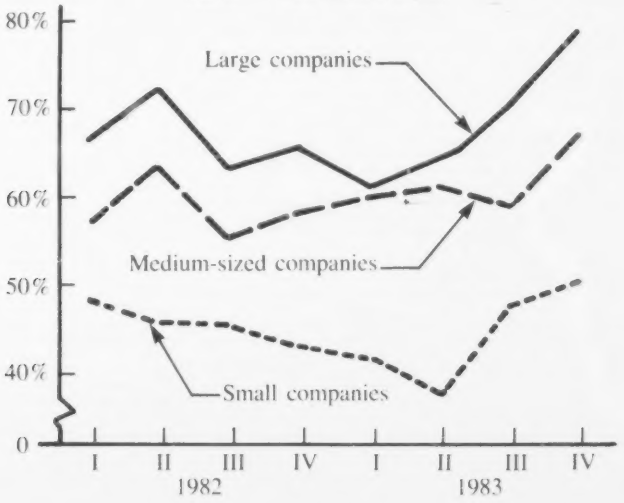
	I	II	III	IV
All Reporting Companies	13.2%	14.5%	18.3%	12.5%
Small Companies	12.1%	16.7%	11.6%	5.8%
Medium-sized Companies	13.2%	16.6%	9.9%	14.7%
Large Companies	16.9%	17.3%	18.6%	19.8%
Direct-Selling Companies	11.5%	9.8%	14.6%	12.1%
Indirect-Selling Companies	14.3%	17.8%	10.9%	12.8%

As usual, balance sheets in the forms industry looked better than the operating statements.

Capacity, of course, continued to be a problem. As in 1982, suppliers of forms production equipment had, as a group, a difficult year. Little new equipment was shipped, and competition from Japanese and European equipment suppliers continued to grow. Even so, rates of capacity utilization remained at very unsatisfactory levels throughout the first half of the year. Though in relative terms these rates showed quite substantial improvement during the third quarter, in absolute terms capacity utilization did not even approach satisfactory levels until the final quarter of the year. And really, another 5 - 10 percentage points' improvement is required before the industry can feel comfortable with its capacity situation.

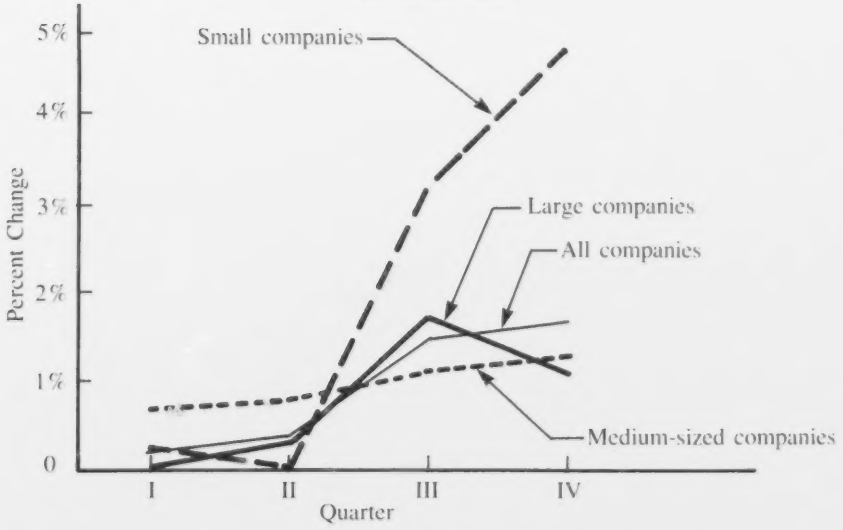
CAPACITY UTILIZATION

100% = 120 Hours/Week



1983 NET CHANGES IN CAPACITY

Annualized Basis

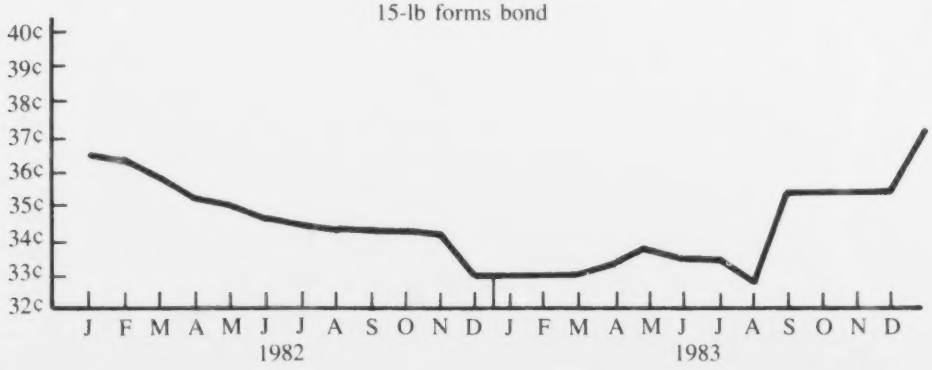


New equipment installations remained at very low levels until year-end. This was the continuation of a pattern going back to the latter half of 1981. At last, however, some relief is in sight for forms production equipment suppliers.

In general, the forms industry incurred some quite large rises in its cost of production that could not be passed on to the customer due to the toughness of the 1983 operating environment. Just as many seasoned industry veterans were surprised by the extent of price wars among paper suppliers in 1982, so were they surprised by the suddenness with which these price cuts were taken back. Wages, too, continued to climb. Though production wages in the industry generally followed a nationwide pattern of moderation if compared with recent history, average hourly wages continued to rise by some 5½%, reaching by year-end an average rate of about $9.40 per hour.

FORMS BOND PRICES

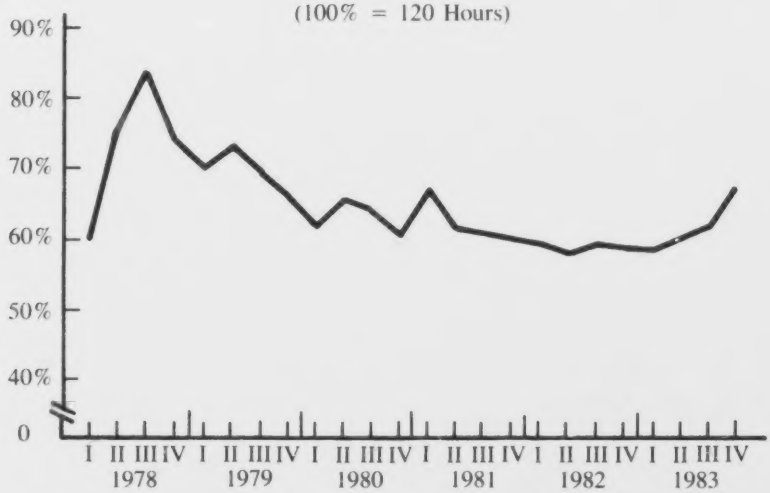
mill price, cents per pound
15-lb forms bond



To sum up, most non-publicly-held forms manufacturers achieved returns on sales in the modest 4-5.5% range. The proportion of companies that showed losses on their operating statements increased quite a lot, though few of these showed a loss on sales of more than a couple of percentage points and thus continued to make some money on a cash-flow basis. 1984 will show some improvement but not as much as many hope. Average returns on sales in the 6-7% range should be anticipated. Of course, as usual the industry's returns on assets, equity and capital were very much better than its returns on sales. In those three areas the forms industry continues to achieve results that even in weak years would be the envy of many other American industries.

INDUSTRY CAPACITY UTILIZATION

1978 - 1983
(100% = 120 Hours)



Here we take a somewhat longer-term view of the capacity situation.

Taking the longer view, it is important to note that actual levels of demand for forms are only half of the equation that determines capacity utilization. The other part of that equation is, of course, the extent of net additions of forms presses and collators. For example, capacity utilization can improve in years of mediocre demand, as indeed it did in 1976. Alternatively, it can decline even in years of very high demand such as 1979. In simple terms, if capacity increases faster than does forms demand, utilization will fall; if forms demand outstrips capacity increases, then utilization will rise.

Excess capacity has been a problem for our industry in four years out of five during the last twenty years. A good part of the explanation is that there has been little substantive change in the industry's production methods. True, there have been a number of product innovations over the years. Most of these innovations, however, have been incremental - evolutionary, not revolutionary. With the exception of the direct mail work with which the forms industry is becoming more and more involved, these innovations have not changed the fundamental design of the forms press or collator. In such an environment, the increased speed, somewhat easier make-ready, and lower maintenance costs of more modern equipment have to be balanced against their higher purchase prices and a level of finance charges that has risen enormously since 1979. The inevitable result is that properly maintained production equipment in our industry has an economic life of easily fifteen to twenty years - or two to three times what one would ordinarily expect.

The second cause of this problem is inherent in growth industries. Capacity in any industry ultimately continues to expand only because demand for that industry's product is growing. Because most growth industries have many good managers in their ranks, these people assess the same information - forecasts, trend analyses, economic reports, etc. - and come, in general terms, to the same conclusions. Thus in the last couple of years, for example, comparatively little new equipment has been installed. Forms company managers have as a group correctly seen little incentive to install more net capacity. Now, with demand growing again, this trend is likely to reverse itself. The odds are that by late 1985 - by which time the industry will have enjoyed perhaps eight quarters of improving utilization levels - increases in capacity will again be overtaking demand for forms.

What is the likelihood of breaking this cycle? Frankly, that likelihood is very low. Certainly, it is possible that some of the industry's older production equipment is finally going to become obsolete as the medium-run custom work for which it was designed eventually stagnates or even declines. However, the impact of such a trend will be both too gradual and too small to bring about fundamental change.

To put it another way, the only event that is likely to change capacity trends and cycles in this industry is long-term, rather than cyclical, decline or stagnation in demand for forms. Without engaging in idle speculation, it is at least clear that such a decline is no closer than the end of this century - if then. The view that "better planning" or a greater concentration of firms might change this equation is not, in truth, a realistic one - quite aside from the fact that neither of these changes is likely to occur except perhaps in the very long run. Those who think otherwise should look at the manufacturers of printing and writing papers. Despite exhaustive planning and considerable concentration of resources, that segment of the paper industry has continued to live from relative feast to relative famine. The reason is simple: it remains a growth segment of its industry. Where there is growth, then new capacity is ultimately always required. In such a situation, it is only to be expected that supply will generally outpace demand. We can only hope to close the gap a bit.

The Forecast

It has become a cliché in this industry to remark that the major components of forms demand are economic activity and the installations and utilization of computers and their associated printers. That statement, however, is no less true for being timeworn. In the case of both of those factors, the main arguments have centered around, firstly, the time lags, and secondly, the correlation between the various rates of change. In fact, the quarterly forms sales data available to us are probably not precise enough to provide definitive answers to either of those questions. Furthermore, the U.S. economy and its financial system have undergone and are continuing to undergo substantial changes that have cheapened many forecasting models developed in earlier years. Nonetheless, IBFI's long experience in analyzing this industry allows us to provide the industry with increasingly accurate forecasts and trend analysis.

BUSINESS FORMS FORECAST:
The Economy

Economists are notorious at the best of times for their propensity to disagree with one another. Since the beginning of 1984, however, the divergence between mainstream forecasters has become especially wide. To summarize briefly, one large camp claims that Federal borrowing will swamp the nation's money markets; that private-sector capital investment will thus be crowded out; and that lack of such investment will bring the recovery to a grinding halt as business proves unable to meet growing demand.

Another faction believes that the Federal Reserve banks will finance the deficit - and thus keep interest rates low - through rapid expansion of the money supply. According to this script, the upturn will carry on in fine fashion for several quarters, but by then inflation will be surging well into double digits again. Looking at a third view, one sees the recovery weakening gradually throughout the year as the Fed restricts money growth and encourages high interest rates in order to keep inflation tamed.

So which of these conflicting economic forecasts is one to believe? As the gap between them widens, the frequency of debate has increased markedly and its tone has become ever more strident - hardly an atmosphere to encourage rational decision-making. Yet, as is so often the case, the sharpness of this dialogue - if such it can indeed be called - obscures the common concerns which are the underpinnings for much of the argument. Put another way, all the various conclusions revolve around three common elements - the budget, politics, and the cost of money. Resolution of these elements requires, in turn, a look at inflation and the policies of the Federal Reserve. So before attempting to reach conclusions about economic performance through the balance of 1984, let us examine the facts from which much of the controversy arises.

First, it is now apparent - and indeed, has been for some time - that the gap between the spending and the income of the Federal government in 1984 will be at least $172 billions and probably more. Why more? In the broadest terms, simply because the actual deficit has exceeded the budgeted deficit for a number of years now. More specifically, the ever-rising portion devoted to so-called entitlement programs - programs whose actual cost in any year is determined by demographic and social phenomena quite outside government control - always seems to be overspent. Second, even in areas where the amount of funding is truly discretionary, one must realize that the Federal budget is never quite the same as Federal spending - and the reader is left to imagine whether these budgets are usually overspent or underspent. More and more of these excesses can be traced to continuing resolutions, whereby the Congress provides funding that never really shows up in the budgets. Finally, in every election year Federal spending is squeezed from both ends in a manner that will inevitably increase the actual deficits: on the one hand, special interest groups of all types can exert their maximum pressure for their pet projects; on the other hand, the politicians will, for better or worse, have little appetite for new tax measures. Nor, at this point, are new tax measures truly helpful. Whatever one thinks of so-called supply-side economics, increasing taxation will decrease private-sector demand and would have no impact on the Federal debt sufficiently positive to overcome that decline in private-sector demand.

The forecasting debate centers, then, on two closely related issues. First, what effect, if any, will these huge Federal deficits have on interest rates? Second, what effect will interest rates have on the economy?

To begin with interest rates, it is not nearly as simple as saying that large deficits will drive rates significantly higher. Our peak interest rates were seen in a period during which the Federal deficit was running at an annual rate only some one-sixth of the 1984 projection. To put matters into perspective, "new" gross saving of some $500 billions will be created during the year, so roughly 40% of these savings will be absorbed by Federal borrowing requirements in the (unlikely) event that the money supply does not grow at all. This percentage - which, again, will be quite a lot smaller if even modest growth of the money supply is allowed - is high by peacetime historical standards, but it is hardly disastrous. After all, in 1983 Federal deficits of the same approximate magnitude failed to generate the rise in interest rates that many economists (IBFI not included) predicted. (It is, by the way, noteworthy that in many cases it is the same individuals who are again predicting a significant rise in interest rates later this year).

One important key to the puzzle is, of course, the policy initiatives of Paul Volcker's Federal Reserve System. He and the Fed's Open Market Committee have considerable power - though little direct control - over the size of the money supply. Their tools include changes in the regulations governing the operations of member banks, the buying and selling of Government securities, and changes in the interest rate charged to member banks for short-term credit.

These mechanisms are very indirect. Worse, the causal linkages to interest rates and inflation are too complex to be yet fully understood by anyone. Because of these problems, the Fed often misses its own goals through no real fault of its own. To compound this imprecision, the Fed is continually walking the toughest of economic tightropes. If it leans too far toward money-supply growth, it risks runaway inflation; if it leans too far toward contraction, it risks skyrocketing interest rates.

Which way the Fed will tilt in the coming months, none of us knows for certain. Fed-watching is a sport to which otherwise intelligent men have devoted entire working lives without tangible result. It is therefore with trepidation that I tread in that arena. Nonetheless, Mr. Volcker's recent unusually frank public speech invites comment. In it, he said that "We have indeed been experiencing a sharp business recovery, consistent with progress against inflation. But excess capacity of both men and machines here and abroad has helped restrain prices. In a sense that cyclical phase is the easiest part, and its about over." He then went on to develop the theme that the issue in coming months was inflation and not interest rates. He remarked further that the responsibility for this effort must lie primarily with the Congress (for the deficit) and organized labor (for restraint in wage demands). These comments are highly consistent with my own firm conviction that, for the sake of its own long-term survival if nothing else, the Fed cannot be highly restrictive in an election year.

Let us presume, then, that despite its often fierce rhetoric, the Fed will be a force for moderation during the coming six months at least. All its recent actions and statements indicate that it is passing the torch in the fight against inflation to other parties. If so, then

rates of interest will be influenced at least as heavily by levels of business investment, consumer borrowing and inflationary expectations as by any Federal action.

With industrial production only just now surpassing 1979 levels and capacity utilization in many industries only just returning to anything like normal levels, it is unlikely that industry will be putting any big squeeze on credit markets. Furthermore, the European economies are lagging the U.S. recovery. Thus, if it comes to it, European capital will continue to be available at moderate cost during most if not all of 1984.

As for inflationary expectation, publicly available data gives us a precise measure of the market's opinion. 90-day and 180-day rates fell until the beginning of the second quarter and are still showing little tendency to move rapidly upward; current levels remain one-quarter percentage point below comparable rates prevailing during the second half of 1983. Rates on notes with maturities of two years and longer, on the other hand, are 15 - 25% higher than the cost of short-term money, and these rates are actually climbing.

In my opinion this market view will prove to be an accurate one. During the next six to nine months, inflation will run at a 5 - 5.5% annual rate - a couple of points higher than 1983 inflation but less than the levels many profess to fear. With the Fed avoiding extremism in either direction, interest rates on 30-day and 91-day notes will move up, but not past 12%.

The result of this analysis is simple. During 1984, economic growth will continue to be robust - in my opinion, substantially more robust than many forecasters are projecting - with real growth nearly as great as in 1983. Depending on government policy initiatives, 1985 will see either a gradual weakening or a substantial weakening. Assuming a normal business cycle, one must anticipate that 1986 and 1987 are likely to be years of very low growth for the economy.

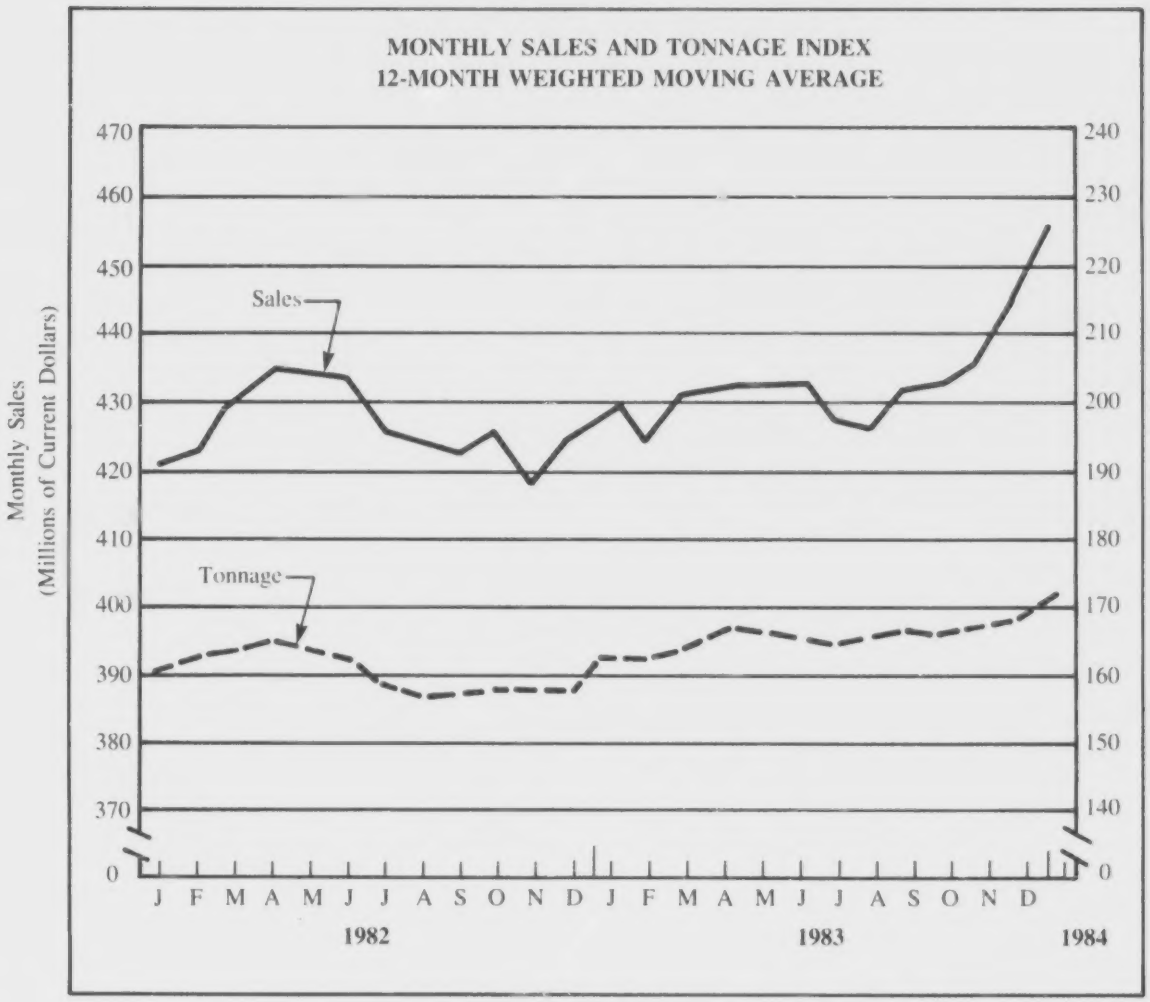
ECONOMIC GROWTH DURING THE FORECAST PERIOD

Year	Real Change in Gross Domestic Product
1984	6.0%
1985	3.5%
1986	2.0%
1987	0.5%
1988	2.7%

What about the longer term? A year ago, I stated that ". . . once we wade through the jargon and the partisan statements of the various politicians and interest groups, there is little difference between Reagan's current policy and the classic Keynesianism against which he ran. Namely, the present administration is achieving its deficit spending through tax cuts while Keynesians would have increased spending." In the short term, "supply-side" Keynesianism is much more effective at achieving growth without inflation than is classical Keynesianism. Both policies, however, are short-term fixes only. In the long term, Federal deficits inevitably cheapen our money and lead to sustained inflation. On the prospects for 1984, I am optimistic - much more so, on balance, than many others. For 1985 and beyond, I see many of our recent problems returning with a vengeance.

THE BUSINESS FORMS FORECAST

These moving averages are presented to illustrate trends in business forms sales. They are weighted to make the charts sensitive to current pressures as well as previous results. They are a good background for examining projected forms sales.



When we turn our eyes away from the economy and toward the forms industry we see a lot more cause for optimism. Unit sets are stubbornly refusing to be displaced by continuous forms. You may expect unit sets to enjoy modest growth as the economy expands - both in this recovery and in many recoveries to come. Sales of pegboard systems also continue to show surprising strength. Many in that segment of the industry feel that the explosion in small computer systems enhances rather than threatens pegboard sales. They see small businesses turning to microcomputers, but in a number of cases these firms are discovering that computers offer no magical alternative to careful record--keeping and logical record flow. Giving up the micro infrustration, such companies are nonetheless unwilling to return entirely to their old ways; at this point they are ripe for a pegboard system. If true, such scenarios promise continued satisfactory growth for that product line in the years just ahead.

As for continuous forms, the number of computers installed in the U.S. continues to rise dramatically. Nor is all of this growth occurring in desktop computers. Though such machines are of course dominating the marketplace in terms of number of units, sales of the much more sophisticated small business systems are remaining at very satisfactory levels. And while relatively few new mainframes are being installed, the 60,000 or so already in place continue to be upgraded in terms of computing power.

For forms manufacturers, this is, of course, all very good news indeed. However, we must temper our enthusiasm. As I have cautioned in past years, there are a number of factors that will cause actual new demand for computer output forms to be lower than a simple straight-line projection would suggest. The primary factor is that as the computer population increases, the consumption of continuous forms per machine declines. Fortunately, the population of computers and their related printers will continue to grow, for the foreseeable future, at a rate much higher than this decline in printer utilization.

The tables below present the IBFI forecast for business forms by major product line for 1984 through 1988. Cyclical economic factors have been separately calculated for each major product. Demand for continuous forms as a whole is based on the projections of computer populations compiled by International Data Corporation (IDC). As outlined above, these projections are massaged so as to account for declining rates of printer utilization, some limited penetration by sut-sheet computer output devices, and in the case of mainframes a certain amount of lost business due to computer output microfiche and other non-forms technologies. In separating continuous forms between stock and custom products, historical trends have been relied upon; it is well known in the industry that with cheaper and more sophisticated computer printers, more and more new demand is for stock products which are then customized by the end-user. The reader should note that the shift in product mix toward stock continuous forms represents a noticeable decline in average levels of value-added. Thus forms growth on a tonnage, sheet, impression or other unit basis will be somewhat greater than in terms of dollars, even if the dollars are uninflated.

All the tables use constant dollars - specifically, January 1, 1984 dollars. Those who believe they can accurately forecast price inflation in the forms industry are encouraged to do so. In adding your own inflation values to these projections, remember to compound them (i.e. inflation values of 6% a year for two consecutive years result in a total price inflation over that period of 12.36%, or 1.06 X 1.06, NOT 12%, which is the result of using simple addition).

Also, these projections are in factory shipment dollars. To estimate retail sales, increase custom continuous by approximately 8%, stock continuous by 3%, unit sets by 12%, and salesbooks and pegboard by 25%. These increases should not be compounded. They do not, however, reflect any possible changes in the industry mix between direct and indirect sales.

(See Charts Next Page)

U.S. BUSINESS FORMS SALES

1984 Versus 1983, By Quarter and Product
(millions of 1984 dollars at shipment values)

1984
Quarter

Product	I	II	III	IV	Total Product
Custom Continuous	531	534	527	544	2,136
Stock Continuous	302	323	320	328	1,273
Unit Sets	364	376	372	380	1,492
Salesbooks, Pegboard	54	57	56	58	225
TOTAL by Quarter	1,251	1,290	1,275	1,310	5,126

1983
Quarter

Product	I	II	III	IV	Total By Product
Custom Continuous	494.0	488.3	484.2	555.3	2,021.8
Stock Continuous	284.7	287.2	297.4	314.5	1,183.8
Unit Sets	322.5	336.2	365.3	401.0	1,425.0
Salesbooks, Pegboard	52.3	49.1	47.3	55.4	204.1
TOTAL by Quarter	1,153.5	1,160.8	1,194.2	1,326.2	4,834.7

U.S. BUSINESS FORMS SALES

Percentage Change By Quarter and Product
1984 vs. 1983

Quarter (1984)

Product	I	II	III	IV	TOTAL
Custom Continuous	7.5%	9.4%	8.8%	(2.1)%	5.6%
Stock Continuous	6.1%	12.5%	7.6%	4.3 %	7.5%
Unit Sets	12.9%	11.8%	1.8%	(5.2)%	4.7%
Salesbooks, Pegboard	3.3%	16.1%	18.4%	4.7 %	10.2%
TOTAL	8.5%	9.8%	6.8%	(1.2)%	6.0%

In this particular case percentage rates of change can look misleading. The fourth quarter, for example, will not be a weak one (in fact, it is projected to be the best quarter in the year). It only appears that way because it is being compared with a phenomenally strong fourth quarter 1983. The reader is advised that except for the totals here, the actual dollar sales projections in the previous tables may be more revealing.

U.S. BUSINESS FORMS SALES
1984 to 1988

(Millions of Jan. 1, 1984 dollars at shipment values)

	Year				
Product	**1984** $	**1985** $	**1986** $	**1987** $	**1988** $
Custom Continuous	2,136	2,210	2,255	2,280	2,375
Stock Continuous	1,273	1,387	1,494	1,540	1,620
Unit Sets	1,492	1,535	1,547	1,539	1,568
Salesbooks, Pegboard	225	250	275	295	312
TOTAL	5,126	5,382	5,571	5,654	5,875

U.S. BUSINESS FORMS SALES

Year-to-Year Change 1984-1988

	Year					
Product	**1984**	**1985**	**1986**	**1987**	**1988**	**TOTAL**
Custom Continuous	5.6%	3.5%	2.0%	1.1 %	4.2%	17.5%
Stock Continuous	7.5%	9.0%	7.7%	3.1 %	5.2%	36.8%
Unit Sets	4.7%	2.9%	0.8%	(0.5)%	1.9%	10.0%
Salesbooks, Pegboard	10.3%	11.1%	10.0%	7.8 %	5.8%	52.9%
TOTAL	6.0%	5.0%	3.5%	1.5 %	3.9	21.5%

The final column labelled "TOTAL" gives total percentage growth 1983-1988. It is in each case higher than the sum of the year-to-year percentage changes due to the effects of compounding.

BUSINESS FORMS FORECAST:
Desktop Computers

The forecast this year requires some special comments on desktop computers and their impact, both present and projected, on the forms industry.

Given the amount of press that has been devoted to these little machines and the companies that manufacture and sell them, it must be well known that some 4.3 million such machines are now in place - though not necessarily in use! - in the U.S. The principal market share belongs to Apple, Radio Shack/Tandy, Commodore, IBM and Timex/Sinclair. IDC projects that some 19 million of such machines will have been purchased by the end of our forecast period. These are certainly impressive numbers - but what do they mean to the forms industry?

First for the good news. The bulk of these machines represent genuine new additions to the nations computing power. For many years to come, they cannot and will not replace mainframes or even small business computers. Though they can indeed be "networked" to a limited extent, these machines will for some time remain fundamentally personal computers. As such, if they have had any negative displacement upon the rest of the computer industry at all, it has been upon the once thriving category of so-called minicomputers. Even here, most analysts would argue that desktops have not actually decreased sales of these slightly more powerful machines but have simply forced their manufacturers to upgrade them into the category of small business computers.

THE DESKTOP COMPUTER EXPLOSION

Year	"Universe"	"Ours"
1982	2,385,000	175,000
1983	5,000,000	480,000
1984	8,000,000	1,000,000
1985	12,000,000	1,500,000
1986	17,000,000	2,200,000
1987	20,000,000	3,000,000

"Universe" refers to the total installed U.S. field population of desktop computers. No allowance has been made for retirements, primarily because a much larger number of these machines will, in fact, not be in use due to user disappointment or frustration. "Ours" is the estimate of desktops that are in business use, are connected to a tractor-fed printer, and generate at least a minimal amount of hard copy on a daily basis. Even with such numbers, this market will be far from saturation in 1987. According to the U.S. Statistical Abstract (1983 ed., p. 528), there are 12,000,000+ active proprietorships, 1,300,000 active partnerships, and 2,557,000 active corporations in the United States.

Furthermore, although only about 30% of desktops are initially equipped with printers, buying a printer is the first and the most common upgrade that the typical user makes. By the time a desktop machine is a year old, two-thirds have printers attached to them; after two years, over four-fifths. Also, although the first computer printer for many such owners is a very inexpensive thermal machine using rolls of plain paper or even sheets, few desktop computer operators are finding such printers satisfactory. The move to tractor feed has been further encouraged by the introduction during the last two years of many inexpensive and reliable tractor-feed dot-matrix impact printers. Prices of units of reasonable quality are now below $300 and continuing to fall.

That these machines will generate new demand for continuous forms is undeniable. That in future years it will come to be a substantial business is equally undeniable. However, one must not be carried away on a wave of enthusiasm. There are factors to be considered that logically must temper our projections for demand from this new source.

First of all, only a portion of these machines are going to business use. And while personal users are (a) often using their home machines for some professional and business purposes as well; and (b) using some forms in any event, their usage even over a year is relatively negligible. To get through a single carton of 3,200 sheets of one-part 9.5 x 11 (8.5 x 11 trim) 15-pound continuous stock forms in a year would require generating almost 10 sheets a day.

Furthermore, even in businesses many of the personal computers being installed are for special purposes that call for little or even no hard-copy output. Thus our real market from these machines is only from those producing substantial numbers of forms on a daily basis. And even after making these "cuts" we cannot count everything as gravy. For one thing, it is essential to distinguish between creation of new demand on the one hand and shifts in demand on the other. Some of the hard copy now being produced in business on desktop or personal computers was previously being produced on a larger computer. Such forms obviously do not represent a direct increase in total demand, but instead, a continuation, even an acceleration, of the trend toward decentralization of computer-printer power that we have been talking about for years. (Of course, with that decentralization goes loss of control, discovery of new uses by the now more actively involved end-user of the hard copy, and, eventually, incremental rises in demand).

Finally, we must remember that nearly 90% of all the new forms demand from these machines will be, for the next few years at least, one-part stock.

This view is not a pessimistic one. We are talking about a true increase in demand that will amount, by 1988, to nearly a 10% direct increase in total forms consumption, with a shipment value of over $400 millions in constant dollars and a retail value substantially greater than that. What we are not talking about, however, is any dramatic change. Not only will this new market develop - like most new markets - relatively gradually, but also, due to its emphasis on stock forms, it will leave the bulk of forms manufacturers all but untouched. And finally, to those who feel that this view is too cautious, I must ask why, with over four million such machines already in use, we have not seen any surge in orders?

NEW CONTINUOUS FORMS DEMAND GENERATED BY DESKTOP COMPUTERS
(in 1983 dollars)

Year	Demand
1982	$ 10,500,000
1983	$ 38,000,000
1984	$ 99,000,000
1985	$175,000,000
1986	$311,000,000
1987	$473,000,000

Remember that these estimates do not include shifted forms demand (i.e. forms that were previously generated on larger computers). Also, approximately 90% of this new demand will be one-part stock, most of it blank. These figures are at factory shipment value, and in the case of this product the final retail mark-up will often exceed 100%.

BUSINESS FORMS FORECAST:
Paper Availability

The short-term business forms forecast presented in this edition of Perspective is a very cheerful one - and with good reason. Furthermore, I believe it more likely that the forecast will be exceeded than that it will be missed. None of the "big" years in the industry's history have been successfully predicted. It would, therefore, be presumptious if not irresponsible were I to project a growth rate much greater than my already optimistic forecast. Nonetheless, many of the key ingredients for a truly big year are in place, should history prove to be a fair guide.

"Big" year or not, 1984 will see substantial growth in forms sales. A key ingredient in meeting this demand will be the availability of paper - our industry's major raw material.

In early November, 1983, paper delivery times were stretching out a bit and paper mills were looking at year-to-date shipments of forms bond that showed gains over 1982 well into double digits. It was my stated opinion at the time that a good part of this activity was the result of inventory rebuilding by forms makers (as well, no doubt, as other users of uncoated free sheet). This assessment, if true, suggested less dizzying gains in forms bond shipments during the first quarter of 1984. The shipment data for December, 1983, and January, 1984, indicated just that sort of cooling-off. To quote the American Paper Institute, "In January . . . the uncoated free sheet grades were down a few percentage points from the fourth quarter 1983 rate." Nonetheless, if my projections for the forms industry are even approximately, borne out, paper demand for the balance of the second quarter and much of the third quarter will again be growing rapidly.

U.S. UNCOATED FREE SHEET CAPACITY UTILIZATION RATES

Year	
1982	**actual = 87.3%**
1983	**actual = 94.6%**

		Pessimistic	Expected	Optimistic
1984	II Qtr.	95.7%	96.8%	97.8%
1984	IV Qtr.	93.1%	94.0%	94.9%
1985		93.7%	94.6%	95.2%

To the forms manufacturer, this situation spells tighter paper supplies, higher prices - and possibly even the dreaded allocations. With shipments already running close to actual mill capacities, an overall second-quarter gain in real demand of perhaps 3% would seriously strain the mills' capacity.

I remain convinced, then, that the second and part of the third quarter will be times of very tight paper supplies, for which forms manufacturers should prepare themselves as best they can. By the middle of the third quarter, however, the situation will have eased significantly. In 1986, uncoated free sheet could well be suffering through another buyers' market.

Appendix
Selected Historical Industry Statistics

APPENDIX A.
Sales Data, Manifold Business Forms
(Millions of Dollars at Shipment Values)

	Unit Sets	Custom Continuous	Stock Continuous	Sales And Other Books	TOTAL
1958	159.6	150.4	18.8	45.2	374.0
1963	265.5	239.4	53.9	39.6	598.4
1967	361.7	391.9	98.0	44.2	895.8
1970	468.4	493.4	185.0	52.3	1,199.1
1971	486.4	518.9	190.0	47.0	1,242.3
1972	547.3	578.2	204.9	51.5	1,381.9
1973	630.2	733.7	282.1	59.8	1,705.8
1974	776.2	966.1	432.2	78.8	2,253.3
1975	781.6	944.9	413.7	78.3	2,218.5
1976	849.1	970.3	521.1	84.8	2,425.3
1977	958.1	981.1	633.9	129.5	2,702.6
1978	1,065.1	1,194.8	680.3	137.9	3,078.1
1979	1,248.7	1,466.9	891.4	154.2	3,761.2
1980	1,323.1	1,657.9	1,031.7	174.1	4,186.8
1981	1,417.2	1,823.7	1,186.5	175.7	4,603.1
1982	1,390.3	1,886.0	1,229.3	184.0	4,689.6

APPENDIX B.
Selected Data From Census Years
(Millions of Dollars at Shipment VAlues)

	Total Forms Manufactured	Of Which Manufactured By Forms Industry	Of Which Made By Other Industries	Non-Forms Made By Forms Industry	Total Industry Shipments
1958	374.0	357.0	17.0	35.3	392.3
1963	598.4	545.0	53.4	93.0	638.0
1967	895.8	809.2	86.6	123.1	932.3
1972	1,381.9	1,267.9	114.0	161.8	1,429.7
1977	2,702.6	2,559.4	143.2	334.6	2,894.0

APPENDIX C.
Growth of Forms Industry Employment
Source: U.S. Census of Manufactures

	Total Number of Companies	Number of Plants	Plants With 20 or More Employees	Total Number of Employees
1958	*	*	168	23.5
1963	439	502	250	28.8
1967	454	542	295	34.6
1972	533	667	376	38.5
1977	604	795	477	45.3

APPENDIX D.
TOTAL U.S. MONTHLY FORMS SALES AT RETAIL VALUES

in thousands of current dollars

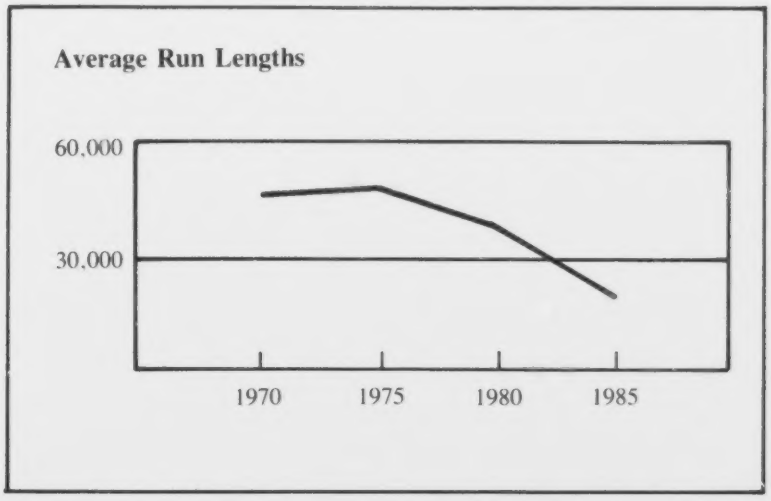
	Retail	Shipment
Jan	$ 436,160	398,965
Feb	371,084	339,235
Mar	450,644	415,800
Quarter	1,257,888	1,153,500
Apr	$ 439,004	401,190
May	410,380	377,010
Jun	420,836	382,600
Quarter	1,270,220	1,160,800
Jul	$ 397,403	371,800
Aug	420,739	389,100
Sep	465,952	433,300
Quarter	1,284,094	1,194,200
Oct	$ 449,904	417,500
Nov	461,772	428,550
Dec	517,323	480,150
Quarter	1,428,999	1,326,200
TOTAL	$5,241,201	4,834,700

APPENDIX E.
Forms Trends: Average Order Sizes

The reader may or may not agree with the precise numbers that my research has assigned to the creation of future forms demand by the growing population of smaller computers. However, no forms manufacturer would deny that increasing use of small computers is impacting the forms marketplace. Furthermore, with a current market penetration of only five to seven percent (as estimated by A. D. Little, Inc., in a recent study), these machines are going to impact our market even more dramatically in the coming years. What is the impact going to mean? What will we find once we get inside the sheer dollar amounts of forms purchases - both at present - and more especially in the near future -by these smaller users?

Certainly, average order sizes are dropping and will continue to do so. Extrapolating the current evidence suggests that in the next five years the total of orders placed with business forms manufacturers will double, although real growth will be more on the order of 30%. The fastest growth in orders of all types of forms will be in the ten-thousand-impression-and-under area, and probably toward the low end of that range. Furthermore, these smaller users will order their smaller lots about 2½ times as frequently as larger customers. As they become more familiar with the world of forms - an education which will take much longer than with larger customers both because of the smaller number of forms processed and the lower levels of attention that can be directed at them by sales departments - custom forms usage will increase. Nonetheless, stock forms will remain the bread-and-butter of this end of the market.

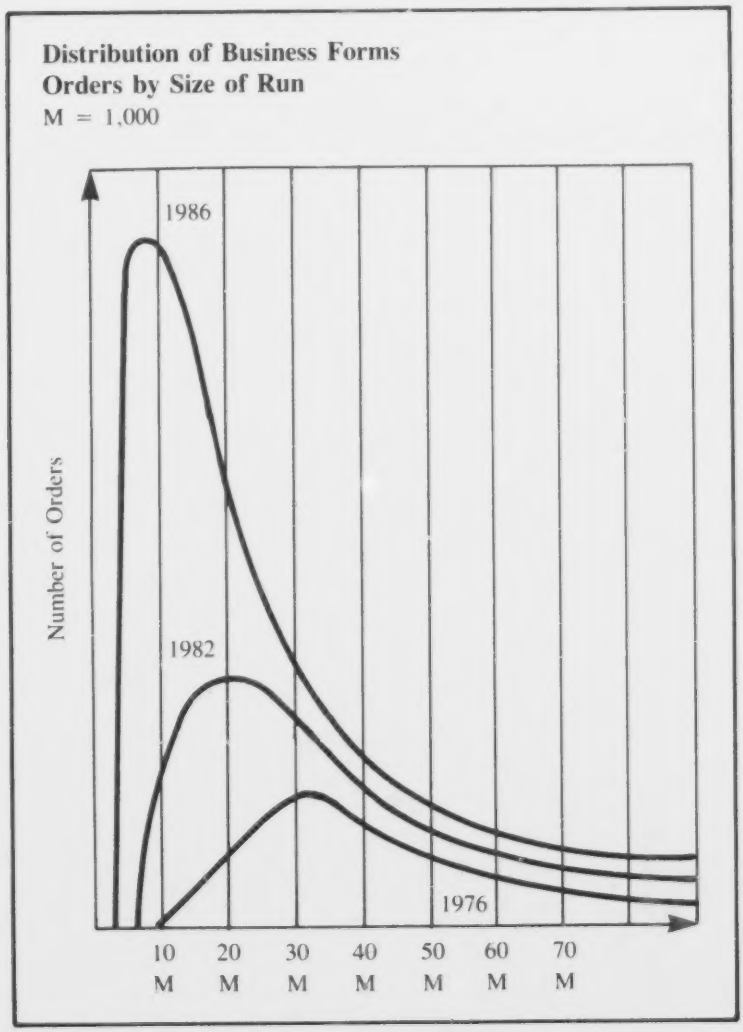
The graph below shows the impact of these changes upon average custom continuous run lengths.



SOURCE: The information in this section is based on IBFI estimates and surveys combined with research by A. D. Little, Inc.

APPENDIX F.

This graph shows the effect of a changing customer base upon numbers and sizes of orders.



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